

---

# Matthew A. Ladwig

## Curriculum Vitae

(Updated July 2022)

---

Department of Biological Sciences  
Purdue University Northwest  
Nils K. Nelson Bioscience Innovation Building: 340B  
Hammond, IN, 46323  
[mladwig@pnw.edu](mailto:mladwig@pnw.edu)



---

### EDUCATION

- 2015 – 2019**     **Doctor of Philosophy (PhD), Kinesiology**  
Iowa State University, Ames, IA, USA
- Areas of Concentration: Exercise Psychology & Youth Physical Activity Promotion  
Dissertation title: "*Dorsolateral prefrontal cortical hemodynamics, cognitive inhibition, and affective responses to exercise among children: Implications for pediatric exercise prescription*"
- 2013 – 2015**     **Master of Science (MS), Kinesiology**  
Ball State University, Muncie, IN, USA
- Majors: Sport and Exercise Psychology & Cognitive and Social Processes  
Thesis title: "*Toward a better peak*": Does a pre-workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making"
- 2008 – 2013**     **Bachelor of Arts (BA), Psychology, with Honors**  
Purdue University – Calumet, Hammond, IN, USA

---

### ACADEMIC EMPLOYMENT

- 2022 – present**     **Assistant Professor of Integrative Human Health**  
Department of Biological Sciences  
Purdue University Northwest, Hammond, IN, USA
- 2019 – 2022**     **Postdoctoral Scholar**  
Department of Medicine  
Penn State College of Medicine, Hershey, PA, USA

**2015 – 2019**      **Graduate Teaching Assistant**  
Department of Kinesiology  
Iowa State University, Ames, IA, USA

**2013 – 2015**      **Graduate Teaching and Research Assistant**  
Department of Psychological Science  
Ball State University, Muncie, IN, USA

---

## TEACHING

### **Purdue University Northwest**

---

HST 108: First Year Experience in Health Studies  
HST 352: Human Lifespan Development  
HST 358: Cultural Diversity in Health and Illness  
HST 448: Stress Management  
HST 495: Exercise Psychology

### **Iowa State University**

---

KIN 366: Exercise Psychology  
KIN 467/567: Exercise and Health: Behavior Change  
KIN 158: Tennis  
KIN 166: Weight Training  
KIN 164: Walking for Fitness

### **Ball State University**

---

PSYS 100: Introduction to Psychological Science  
PSYS 301: Health Psychology

### **Purdue University – Calumet (Northwest)**

---

PSY 120: Introductory Psychology – Supplemental Instructor

---

## RESEARCH FUNDING

### ***Funded proposals***

---

**2022**      Title: *Evaluation and Implementation of Lifestyle Changes and Life's Simple 7 in Northwest Indiana*  
Source: Indiana Department of Health  
Role: Co-PI (PI: John J. Durocher)  
Total costs: \$133,000

**2019**      Title: *Development of a novel exercise program to maximize youth enjoyment.*  
Source: Pennsylvania Department of Health: Commonwealth Universal Research Enhancement Program (CURE)  
Role: Co-Investigator (with Jennifer P. Agans and Ian M. Paul)

Total costs: \$150,000

- 2015** Title: *The psychological effects of a pre-workout warm-up: An exploratory study.*  
Source: Ball State University Thesis Grant Competition  
Role: Principal Investigator  
Amount requested: \$300
- 2015** Title: *The psychological effects of a pre-workout warm-up: An exploratory study.*  
Source: Ball State University ASPIRE Travel Grant  
Role: Principal Investigator  
Amount requested: \$100
- 2014** Title: *Toward a better peak: Does a pre-workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making.*  
Source: Association for Applied Sport Psychology (AASP): Student Research Grant  
Role: Co-Investigator (with Selen Razon)  
Total costs: \$2,100

### ***Submitted proposals***

---

- 2021** Title: *How can we promote physical activity among adolescents with below-average movement skill competency?*  
Source: National Institute of Child Health and Human Development (NICHD)  
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
Requested: \$445,994
- 2021** Title: *Designing enjoyable physical activity for adults with low physical activity enjoyment.*  
Source: National Heart, Lung, and Blood Institute (NHLBI)  
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
Requested: \$445,994
- 2020** Title: *Identifying the optimal home prescription of functional exercises for older adults in primary care.*  
Source: National Institute on Aging (NIA)  
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
Requested: 2,174,963
- 2020** Title: *Impact of automatic enrollment into a digital physical activity program for older adults in primary care.*  
Source: National Institute on Aging (NIA)  
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
Requested: \$2,246,497

- 2020** Title: *Impact of ultra-brief functional exercise prescriptions on physical performance among older adults in primary care.*  
 Source: National Institute on Aging (NIA)  
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
 Requested: \$1,974,963  
 Impact Score: 45, Percentile: 39
- 2020** Title: *Adolescents and parents playing together: A dyadic approach to physical activity promotion.*  
 Source: National Institute of Child Health and Human Development (NICHD)  
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
 Requested: \$432,450
- 2020** Title: *Developing more enjoyable exercise for adolescents with low tolerance of exercise intensity.*  
 Source: National Institute of Child Health and Human Development (NICHD)  
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)  
 Requested: \$435,344
- 2018** Title: *Affective and neurophysiological responses to physical activity among children: Implications for subsequent physical activity behavior.*  
 Source: American Psychological Foundation (APF): Visionary Role: Co-Investigator (with Panteleimon Ekkekakis)  
 Requested: \$14,492
- 2018** Title: *Affective and neurophysiological responses to graded exercise in children: What are the mechanisms?*  
 Source: American College of Sports Medicine (ACSM) Foundation: Doctoral Student Research Grant  
 Role: Co-Investigator (with Panteleimon Ekkekakis)  
 Requested: \$4,486

---

## MANUSCRIPTS IN PEER-REVIEWED JOURNALS

- 10) **Ladwig, M. A.,** Sciamanna, C. N., Auer, B. J., Oser, T. K., Stine, J. G., & Agans, J. P. (2021). When American adults *do* move, *how* do they do so? Trends in physical activity intensity, type, and modality: 1988-2017. *Journal of Physical Activity & Health*, 18(9). <https://doi.org/10.1123/jpah.2020-0424>
- 9) **Ladwig, M. A.,** Sciamanna, C. N., Rovniak, L. S., Conroy, D. E., Auer, B. J., Gottschall, J. S., Silvis, M. L., Smyth, J. M., & Wang, M. (2021). Adult group sport play during a pandemic: Feasibility, acceptability, and program adherence results from a study of modifications to mitigate COVID-19 risk. *Preventive Medicine Reports*. <https://doi.org/10.1016/j.pmedr.2021.101476>
- 8) **Ladwig, M. A.,** Sciamanna, C. N., Rovniak, L. S., Conroy, D. E., Auer, B. J., Gottschall, J. S., Silvis, M. L., Smyth, J. M., & Wang, M. (2021). Comparative effectiveness of social

physical play versus traditional group exercise for adherence and fitness: Protocol for a randomized-controlled trial. *Contemporary Clinical Trials Communications*, 21, 100736. <https://doi.org/10.1016/j.conctc.2021.100736>

- 7) Hartman, M. E., **Ladwig, M. A.**, & Ekkekakis, P. (2021) Contactless differentiation of pleasant and unpleasant valence: Assessment of the acoustic startle eyeblink response with infrared reflectance oculography. *Behavior Research Methods*. <https://doi.org/10.3758/s13428-021-01555-z>
- 6) Sciamanna, C. N., **Ladwig, M. A.**, Conroy, D. E., Schmitz, K. H., Silvis, M. L., Ballentine, N. H., Auer, B. J., & Danilovich, M. K. (2021). Feasibility and impact of a 1-minute daily functional exercise regimen prescribed to older adults by their primary care physician. *Preventive Medicine Reports*, 21, 101307. <https://doi.org/10.1016/j.pmedr.2020.101307>
- 5) Vazou, S., Mischo, A., **Ladwig, M. A.**, Ekkekakis, P., & Welk, G. (2019). Psychologically informed physical fitness practice in schools: A field experiment. *Psychology of Sport & Exercise*, 40, 143-151. <https://doi.org/10.1016/j.psychsport.2018.10.008>
- 4) **Ladwig, M. A.**, Ekkekakis, P., & Vazou, S. (2018). "My best memory was when I was done with it": PE memories are associated with adult physical activity. *Translational Journal of the American College of Sports Medicine*, 3(16), 119- 129. <https://doi.org/10.1249/TJX.0000000000000067>
- 3) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (2018). Mass media representations of the evidence as a possible deterrent to recommending exercise for the treatment of depression: Lessons five years after the extraordinary case of TREAD-UK. *Journal of Sports Sciences*, 1-12. <https://doi.org/10.1080/02640414.2018.1423856>
- 2) **Ladwig, M. A.**, Hartman, M. E., & Ekkekakis, P. (2017). Affect-based exercise prescription: An idea whose time has come? *ACSM's Health & Fitness Journal*, 21(5), 10-15. <https://doi.org/10.1249/FIT.0000000000000332>
- 1) **Ladwig, M. A.** (2013). The psychological effects of a pre-workout warm-up: An exploratory study. *Journal of Multidisciplinary Research*, 5(3), 79-87.

---

## MANUSCRIPTS UNDER REVIEW

- 1) Sciamanna, C. N., Lemaster, K. A., Danilovich, M. K., Conroy, D. E., Schmitz, K. H., Silvis, M. L., **Ladwig, M. A.**, & Ballentine, N. (under review). Accuracy of self-reported physical capacities as a clinical screening test for older adults with mobility disability.
- 2) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (under review). A methodological checklist for studies of pleasure and enjoyment responses to high-intensity interval training (HIIT): Part I. Participants and measures.

- 3) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (under review). A methodological checklist for studies of pleasure and enjoyment responses to high-intensity interval training (HIIT): Part II. Intensity, timing of assessments, data modeling and interpretation.
- 4) **Ladwig, M. A.**, Sciamanna, C. N., Luzier, G., Blaker, J. M., Agans, J. P., Visek, A. J. (under review). Maximizing reflective evaluations of sport enjoyment through repeated experiences of fun during sport – Design, feasibility, and acceptability of the PlayFit Youth Sport Program.

---

## BOOK CHAPTERS

- 5) Zenko, Z., & **Ladwig, M. A.** (2021). *Affective responses to exercise: Measurement considerations for practicing professionals*. In Z. Zenko & L. Jones (Eds.), *Essentials of exercise and sport psychology: An open access textbook* (pp. 271–293). Society for the Transparency, Openness, and Replication in Kinesiology.  
<https://doi.org/10.51124/B1012>
- 4) Ekkekakis, P., Hartman, M.E., & **Ladwig, M. A.** (2019). *Affective responses to exercise*. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (4th ed.). New York: Wiley. <https://doi.org/10.1002/9781119568124.ch12>
- 3) Ekkekakis, P., Hartman, M.E., & **Ladwig, M. A.** (2019). *Conceptual foundations of exercise psychology: Facilitators, inhibitors, and a roadmap towards establishing societal relevance*. In M.H. Anshel (Ed.), *Handbook of sport and exercise psychology* (Vol 2). Washington, DC: American Psychological Association.  
<https://doi.org/10.1037/0000124-002>
- 2) Ekkekakis, P., **Ladwig, M. A.**, & Hartman, M.E. (2018). *Physical activity and the "feel-good" effect: Challenges in researching the pleasure and displeasure people feel when they exercise*. In S.R Bird (Ed.), *Research methods in physical activity and health*. New York: Routledge. <https://doi.org/10.4324/9781315158501-20>
- 1) Ekkekakis, P., Zenko, Z., **Ladwig, M. A.**, & Hartman, M.E. (2018). *Affect as a potential determinant of physical activity and exercise: Critical appraisal of an emerging research field*. In D.M. Williams, R.E. Rhodes, & M. Conner (Eds.), *Affective determinants of health behavior*. New York: Oxford University Press.  
<https://doi.org/10.1093/oso/9780190499037.001.0001>

---

## PUBLISHED ABSTRACTS

- 5) **Ladwig, M. A.**, & Sciamanna, C. N. (2020). Adults want to play too: Social play versus group training for exercise enjoyment and adherence: Preliminary data from a randomized-controlled trial. *Journal of Sport & Exercise Psychology*, 42, S89-S89.

- 4) **Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (2019). Childhood prefrontal development and affect during fitness tests: Should we reconsider current practice norms? *Journal of Sport & Exercise Psychology*, 41, S275-S275.
- 3) **Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (2018). Childhood experiences in physical education may have long-term implications. *Medicine & Science in Sport & Exercise*, 50(5), S319.
- 2) **Ladwig, M. A.**, & Ekkekakis, P. (2017). Are physical education experiences associated with physical activity attitudes and intentions in adulthood? *Journal of Sport & Exercise Psychology*, 39, S276-S276.
- 1) **Ladwig, M. A.**, & Razon, S. (2014). The psychological effects of a pre-workout warm-up. *Journal of Sport & Exercise Psychology*, 36, S98-S98.

---

## ACADEMIC PRESENTATIONS

- 12) **Ladwig, M. A.**, & Sciamanna, C. N. (2020, June). Adults want to play too: Social play versus group training for exercise enjoyment and adherence: Preliminary data from a randomized-controlled trial. Presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). *Virtual conference due to SARS-CoV-2 pandemic.*
- 11) **Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (2019, June). Childhood prefrontal development and affect during fitness tests: Should we reconsider current practice norms? Presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Baltimore, MD, USA.
- 10) Hartman, M. E., **Ladwig, M. A.**, & Ekkekakis, P. (2019, June). Prefrontal hemodynamics and affective responses to incremental exercise. Presented at the annual conference of the American College of Sports Medicine (ACSM). Orlando, FL, USA.
- 9) **Ladwig, M. A.**, Ekkekakis, P., & Vazou, S. (2018, June). Childhood experiences in physical education may have long-term implications. Presented at the annual conference of the American College of Sports Medicine (ACSM). Minneapolis, MN, USA.
- 8) **Ladwig, M. A.**, Ekkekakis, P. (2017, June). Are childhood physical education experiences associated with adult physical activity attitudes and intentions? Presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). San Diego, CA, USA.
- 7) **Ladwig, M.A.**, & Razon, S. (2015, February). Toward a better peak: Does a pre-workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making: Initial thoughts and results. Presented at the annual

Midwest Sport and Exercise Psychology Symposium (MSEPS). Ball State University, Muncie, IN, USA.

- 6) **Ladwig, M. A.**, & Razon, S. (2014, June). The psychological effects of a pre-workout warm-up. Presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Minneapolis, MN, USA.
- 5) Devia, M., Connor, B.D., **Ladwig, M.A.**, Phillips, C.M., Cook, L.M., Alves, K., & Butler, D.L. (2014, April). What do you believe? Developing accurate measures of myths and misconceptions. Presented at the 19th Annual Student Symposium at Ball State University, Muncie, IN, USA.
- 4) Alves, K., **Ladwig, M. A.**, Pierce, J., Strzok, N., & Butler, D. (2014, April). Student attitudes toward concept map, essay, and multiple-choice testing. Presented at the annual Butler University Research Conference. Indianapolis, IN, USA.
- 3) **Ladwig, M. A.**, & Razon, S. (2014, February). Does a pre-workout warm-up facilitate performance on a concentration task? Presented at the annual Midwest Sport and Exercise Psychology Symposium (MSEPS). Bowling Green University, Bowling Green, OH, USA.
- 2) **Ladwig, M. A.** (2013, February). Differential effects of repetition counting techniques in weight lifting: Can they help reduce perceived exertion? Presented at the annual Midwest Sport and Exercise Psychology Symposium (MSEPS). Hope College, Holland, MI, USA.
- 1) **Ladwig, M. A.** (2012, May). The psychological effects of a pre-workout warm-up. Presented to faculty and students. Purdue University-Calumet Interdisciplinary Studies Program. Hammond, IN, USA.

---

## NEWS COVERAGE OF RESEARCH

[Reuters](#), [The New York Times](#), Canadian Broadcasting Corporation, New York Magazine, Fox5 New York, Slate, Bustle, Elite Daily, Channel NewsAsia, Medical Express, Physician's Briefing

---

## PROFESSIONAL SERVICE

### *Peer-Review*

Adapted Physical Education Quarterly  
Journal of Aging and Physical Activity  
Journal of Medical Internet Research: Formative Research  
Journal of Medical Internet Research: Research Protocols  
Journal of Sport & Exercise Psychology  
PLoS One  
Psychology of Sport and Exercise



---

## PROFESSIONAL AFFILIATIONS

North American Society for the Psychology of Sport and Physical Activity (NASPSPA)  
American College of Sports Medicine (ACSM)  
American Psychological Association (APA), Division 47: Sport and Exercise Psychology  
Society for Transparency, Openness, and Replication in Kinesiology (STORK)

---

## ACADEMIC HONORS AND AWARDS

- 2019**     *University Research Excellence Award* – Iowa State University
- 2018**     *Alice Ford Family & Consumer Science Scholarship* – Iowa State University
- Barbara E. Forker Graduate Scholarship* – Iowa State University
- 2015**     *Pease Family Doctoral Scholarship* – Iowa State University
- Graduate Student Researcher of the Year* – Ball State University Sport and Exercise Psychology graduate program
- Most Recognizable Graduate Student* – Ball State University
- 2014**     *Most Recognizable Graduate Student* – Ball State University
- 2013**     *Graduated with Distinction* – Purdue University–Calumet
- 2012**     *Outstanding Senior* – Purdue University–Calumet, Liberal Arts and Social Sciences
- 2010**     *Psi Chi Inductee*: The International Honor Society in Psychology